

REMARKS

The Examiner has rejected a number of claims as being unpatentable under 35 U.S.C. 102 in view of U.S. Patent No. 6,496,980 issued to Tillman et al. The Examiner states that with Tillman, "data of the same digital video stream is used to enhance the selected video segment, which is the particular video frame, via different layers (see figures 3 and 4)" (emphasis added by Examiner). The Examiner also states that Tillman relies upon "a single video stream of the original video frame as shown in figure 4 and col. 7, lines 19 - 50" (emphasis added by the Examiner). Upon careful consideration of the Examiner's remarks, the Applicant respectfully disagrees with the Examiner in a number of respects. Firstly, Tillman clearly and unequivocally states that at least two video data streams are required. Specifically, at column 7,

"At various times when viewing multimedia content, a user may desire to replay a segment of video that was just transmitted from the server, received by the client, and displayed to the user. For example, assume that the user desires to view the previous 30 seconds or 60 seconds of video again, but with a higher quality image. Since the video data was streamed from the server system to the client system in real-time, either a retransmission of the original video data will take place or the video data will be stored upon original reception for subsequent replay. However, in either case, the quality of the image during replay would be the same as when the image was first displayed because the same video data is being used to generate the subsequent display. To overcome this limitation, an embodiment of the present invention uses the layered video streams capability of H.263+ to produce a higher quality replay for a limited bandwidth communications path."

and, at column 5,

"A client system 44 (such as a personal computer system, for example) may be coupled to server system 32 as a multimedia access and display device via communications path 34. The communications path comprises a limited bandwidth communications link (for example, a 56K BPS link). Client system 44 may comprise a decoder 46 for decompressing and decoding H.263+ layered streams received by the client and a graphical user interface 48 for displaying the video data signals of the streams to the user and for accepting user input selections. Graphical user interface 48 may be used to select desired multimedia content, such as stored content 40 or live data from camera 42, as a signal source for a digital video stream. Corresponding audio data signals may also be transmitted to the client system on an audio stream".

Therefore, in order to provide the higher quality image, Tillman specifically teaches that at least a **two layered video stream** is required in order to provide the requisite replay on demand at a higher quality level (i.e., the base layer and at least one additional enhancement layer). In addition, the multilayered video streams must be compatible with H.263+ consistent with a limited bandwidth communications path.

In contrast, claim 1 as amended specifically teaches only a single layer video stream and therefore does not require a second video stream as demanded by Tillman. More specifically, claim 21 recites:

"A method of enhancing a selected digital video frame, or a portion thereof, included in a single layer digital video stream, comprising:
selecting from the single layer digital video stream, a particular one of the digital video frames for enhancement;
selecting from the single layer digital video stream, others of the digital video frames associated with the digital video frame to be enhanced; and
enhancing the selected digital video frame based upon information included in the other digital video frames and the particular digital video frame."

Accordingly, the Applicant believes that claim 21 is not anticipated by Tillman and respectfully requests that the Examiner withdraw the 35 U.S.C. 102 rejection thereof. Independent claims 28 and 35 recite essentially the same limitations, as does claim 21, albeit as computer program product and apparatus embodiments, respectively, and are also believed to be allowable for at least the same reasons as claim 21. All remaining dependent claims depend either directly or indirectly from claims 21, 28, and 35 and are also believed to be allowable.


A number of claims were rejected under 35 U.S. C. 103(a) as being unpatentable over Tillman et al in view of McDade et al. which has been discussed at length in previous responses to the Examiner. Again, the Applicant believes that no reasonable combination of Tillman and McDade render any of the pending claims unpatentable for being obvious and respectfully requests that the Examiner withdraw the 35 U.S.C. 103(a) rejection thereof.

CONCLUSION

In view of the foregoing, it is respectfully submitted that all pending claims are allowable. Should the Examiner believe that a further telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

Respectfully submitted,

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